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PRIETO, B	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 08/924,785	Applicant(s) PRATT, RICHARD W.	
	Examiner B. PRIETO	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 May 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15)☐ Notice of References Cited (PTO-892)
16)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18)☐ Interview Summary (PTO-413) Paper No(s). _____ .
19)☐ Notice of Informal Patent Application (PTO-152)
20)☐ Other:

Detailed Action

1. This office action is in response to Request for reconsideration filed 05/11/01, claims **1-46** remain pending.

Claim Rejections - 35 USC § 103

2. Quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action:

3. Claims 1-2, 4-15, 17-28, 30-38, 40-43, and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hogan et. al (Hogan) U.S. Patent No. 5,778,368 in view of Lindholm U.S. Patent No. 5,859,982.

Regarding claim 1, 13, 27 Hogan teaches features of the invention substantially as claimed, Hogan a method/means for manufacturing a network device comprising the steps of: obtaining a network device control software program from a network device such as a web server(s) system (Fig. 2, A, B, C); obtaining a downloadable unit (col 7/lines 28-34) configured to communicate with the network device control software program for later transmission over a network to a remote client to enable the remote client to remotely configure the network device (col 15/lines 37-col 16/line 67), the downloadable unit including a communicator component for establishing a communications channel between the remote client and the software program (col 21/lines 1-10), an interface component for enabling a user to communicate with the downloadable unit (col 8/lines 15-18, col 5/lines 12-20, col 16/line 6-39, col 6/lines 43-44), and a configuration component for managing and configuring the remote device or the software program (col 16/lines 37-63, col 5/lines 12-15); compiling the software program into a binary file (col 11/lines 32-33, col 16/lines 27-28); embedding the downloadable unit into the binary file (col 7/lines 28-34) storable in network devices (Fig. 2, (7, 10, 11, 12)); and loading the into binary file with the embedded downloadable unit onto the network device (col 7/lines 28-34); Hogan teaches a system/method for configuring a network device(s) (Fig. 2 (8)), comprising means for obtaining a software program for controlling/configuring said network device from a network device such

as a repository Server(s) (Fig. 2, (A)), obtaining repository (downloadable) units (52) comprising components configured to support communication with the remote client network device operating system to support the later transmission over the a network, the downloadable units comprising a piece of embedded software, component, prefabricated building software (i.e. framework) in a binary file product stored in a remote repositories (Fig. 1, (3)), accessed via said servers, (col 7/lines 28-34, col 8/lines 43-49, col 9/lines 14-36), means for generating a downloadable unit packet that enables user via corresponding component to select the files to be combined into a repository unit 52, downloadable via FTP or HTTP communication means support by clients web browser with server program, (col 16/lines 29-56, col 8/lines 11-14, col 13/lines 51-col 14/line 8), where downloadable units stored at may comprise: communication components means for establishing a connection (col 8/lines 15-18), interface components comprising means for supporting the user to communicate with the downloadable unit (col 11/lines 14-54), configuration components for managing and configuring the remote client device (col 16/lines 63-67, col 5/lines 12-15);

However Hogan does not explicitly teach where repository units (52) are denoted "downloadable units";

Lindholm teaches means for compiling software programs into a binary file portable (i.e. downloadable) files (col 1/lines 15-65), further embedding downloadable software (e.g. a Java class file, col 18/line 12-22) into the said binary file for execution on a remote client device (Fig. 1, 102) upon loading the binary files with the embedded downloadable software code onto the network device, wherein binary files obtained from server (Fig. 1, 104) executing an operating system are accessed from client network device executing a communication program interface that enables client network device communicate with server (col 4/lines 15-col 6/line 4, col 12/lines 29-43), a communication software program interface that enables network client to execute and display said binary file; and a communication software operating system for controlling said network device (Fig. 1);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Hogan's system with means for generating downloadable units, as taught by Lindholm by embedding downloadable units into a compiled binary file for transmitting to a remote client network device and loading the binary file with the embedded downloadable unit

onto said network device, packing downlodable units comprising communication components means for establishing a connection, having interface components comprising means for supporting the user to communicate with the downloadable unit, configuration components for managing and configuring the remote client device, as discussed by Hogan, motivation would be make the these downloadable units independent of specific architecture or platform of the computer system, enabling these to be directly loaded in the run-time memory, where the receiving network is freed from handling the cycle of software purchase, installation, configuration and upgrade that is currently typical of software products.

Regarding claims 2 and 4, the combined teachings of Hogan and Lindholm as discussed above, teach features of the invention substantially as claimed, wherein the step of obtaining a downloadable unit includes embedding Java TM class (Lindholm: col 1/lines 39-65, col 5/line 34-59, Java classes: col 4/lines 47-56, downloadable units stored as Java class objects: col 12/line 36-50); wherein the step of obtaining a downloadable unit includes more than one downloadable unit (Hogan: col 7/lines 62-65, col 8/lines 59-col 9/lines 3, 30-36, col 13/lines 51-col 14/line 8).

Regarding claims 5-6, the combined teachings of Hogan and Lindholm as discussed above, further comprising the step of bundling the more than one downloadable units into a downloadable unit bundle (Hogan: col 7/lines 41-43, col 11/lines 32-33); and bundling the downloadable units according to function (Hogan: col 10/lines 24-36).

Regarding claims 7-8, the combined teachings of Hogan and Lindholm as discussed above, further comprising the step of bundling the downloadable unit cording to version (Hogan: col 9/lines 40-54); and bundling sharable downloadable units into a default bundle (Hogan: col 8/lines 43-52).

Regarding claim 9, the combined teachings of Hogan and Lindholm as discussed above, wherein the software program includes the operating system executing on network device (Hogan: col 7/lines 54-64).

Regarding claim 10, the combined teachings of Hogan and Lindholm as discussed above, wherein the network device includes a router (Hogan: col 17/lines 1-25).

Regarding claim 11, the combined teachings of Hogan and Lindholm as discussed above, further comprising the step of creating a table of contents for the downloadable unit bundle (Hogan: col 13/lines 51-col 14/line 8).

Regarding claim 12, the combined teachings of Hogan and Lindholm as discussed above, wherein the step of embedding the downloadable unit includes embedding the downloadable unit bundle into the binary file (Hogan: col 7/lines 28-34).

Regarding claim 14-15, and 17 this claim is the system associated with the method disclosed on claim 10, 2, and 5, respectively, same rationale is applicable.

Regarding claim 18, the combined teachings of Hogan and Lindholm as discussed above, wherein the downloadable units have been combined into downloadable unit bundles (Hogan: col 7/lines 28-34).

Regarding claims 19-20-22, this claim is the system associated with the method disclosed on claim 6-7, 9-10, respectively, same rationale is applicable.

Regarding claim 23 the combined teachings of Hogan and Lindholm as discussed above, wherein the web server communicates with the remote client using a file transfer protocol (Hogan: col 8/lines 11-14, col 8/line 59-col 9/line 6, col 11/line 15-17).

Regarding claim 24, the combined teachings of Hogan and Lindholm as discussed above, wherein the web server communicates with the remote client using an internet protocol (Hogan: col 8/lines 11-14, col 8/line 59-col 9/line 6, col 11/line 15-17, col 1/lines 18-21).

Regarding claim 25, the combined teachings of Hogan and Lindholm as discussed above, wherein the software program includes an extractor for extracting the embedded downloadable unit (Hogan: col 7/lines 41-46, col 11/lines 32-33, col 15/lines 64-67, col 16/line 27-28).

Regarding claim 26, the combined teachings of Hogan and Lindholm as discussed above, wherein the software program is currently executing on the network device (Hogan: col 12/lines 11-25, col 13/lines 51-col 14/line 8, Lindholm: Fig. 1, (102:132, 128, 138, 140, 142, 145), 104: 112, 120, 122, 145, 116)).

Regarding claim 28, this claim is substantially the same as claim 2, 15, same rationale is applicable.

Regarding claim 29, this claim is substantially the same as claim 3, 16, same rationale is applicable.

Regarding claim 30, this claim is substantially the same as claim 5, 17, same rationale is applicable..

Regarding claim 31, this claim is substantially the same as claim 17 and 18, same rationale is applicable.

Regarding claim 32, this claim is substantially the same as claims 21, 26, same rationale is applicable.

Regarding claim 33, this claim is substantially the same as claims 10, 14, same rationale is

applicable.

Regarding claim 34, the combined teachings of Hogan and Lindholm as discussed above, wherein the means for establishing a communications link includes means for using a URL (Hogan: col 8/lines 11-14, col 8/line 59-col 9/line 6, col 11/line 15-17, col 1/lines 18-21).

Regarding claim 35, the combined teachings of Hogan and Lindholm as discussed above, wherein the means for establishing a communications link includes means for opening an internet protocol connection (Hogan: col 8/lines 11-14, col 8/line 59-col 9/line 6, col 11/line 15-17, col 1/lines 18-21).

Regarding claim 36, this claim is substantially the same as claims 23, same rationale is applicable.

Regarding claim 37, the combined teachings of Hogan and Lindholm as discussed above, wherein the means for establishing a communications link includes a web engine (Hogan: 13/lines 1-6, col 11/line 14-24).

Regarding claim 38, the combined teachings of Hogan and Lindholm as discussed above, wherein the means for running the downloadable unit includes a Java Tm Virtual machine (JVM) (Lindholm: Fig. 1, 142, col 1/lines 39-50, col 5/lines 34-59).

Regarding claim 40-42, the combined teachings of Hogan and Lindholm as discussed above, a system/means and associated computer-storage medium storing program code for enabling a computer to execute stored code comprising the steps of: receiving from a remote client a request (Hogan: col 13/lines 51-col 14/line 24, 56-60, col 19/lines 30-40) to manage a network device control software program having a binary file (Hogan: col 11/lines 32-33, col 16/lines 27-28, col 7/lines 28-34, Lindholm: col 1/lines 15-65, col 18/line 12-22, col 4/lines 15-col 6/line 4, col 12/lines 29-43, Fig. 1); locating a downloadable unit which corresponds to the request and is embedded in the binary file (Hogan: col 14/lines 9-col 15/lines 13); extracting the downloadable

unit from the binary file; and forwarding the downloadable unit to the remote client (Hogan: col 16/lines 57-62, col 7/lines 44-47) .

Regarding claim 43, the combined teachings of Hogan and Lindholm as discussed above, a system comprising: a web server for receiving from a remote client a request to manage a network device control software program which has a binary file with an embedded downloadable unit for performing the request, the downloadable unit including a communicator component for establishing a communications channel between the remote client and the software program, an interface component for enabling a user to communicate with the downloadable unit, and a configuration component for managing and configuring the remote device or the software program; an extractor coupled to the web server for extracting the downloadable unit from the binary file; and a communicator coupled to the extractor for forwarding the downloadable unit to the remote client (Hogan: Fig. 2 (8), (A), (52), (10), col 7/lines 28-34, col 8/lines 11-18, 43-49, col 9/lines 14-36, col 16/lines 29-67, col 13/lines 51-col 14/line 8, col 11/lines 14-54, col 5/lines 12-15, col 14/lines 9-col 15/lines 13, col 16/lines 57-62, col 7/lines 44-47) .

Regarding claim 45-46, the combined teachings of Hogan and Lindholm as discussed above, wherein the software program includes a list of available functions and downloadable unit available; (Hogan: col 13/lines 51-col 14/line 8).

4. Claim **44** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hogan et. al (Hogan)** U.S. Patent No. **5,778,368** in view of **Lindholm** U.S. Patent No. **5,859,982** in further view of **Nakagawa et. al. (Nakagawa)** U.S. Patent No. **5,832,911**.

Regarding claim 44, the combined teachings of Hogan and Lindholm as discussed above, a method for modifying available remote device management services, comprising the steps of: obtaining a new downloadable unit for performing a new service, the new downloadable unit including a communicator component for establishing a communication channel between the remote client and a network device control software program, an interface component for

enabling a user to communicate with the downloadable unit, and a configuration component for managing and configuring the remote device or the software program; and loading the network device control software program binary file having the new downloadable unit onto the network device (Hogan: (Figs. 1-2, col 7/lines 28-34, col 15/lines 37-col 16/line 67, col 21/lines 1-10, col 8/lines 11-18, 43-49, col 5/lines 12-20, col 16/line 6-39, col 6/lines 43-44, col 11/lines 14-33, col 9/lines 14-36, col 13/lines 51-col 14/line 8), col 16/lines 63-67, Lindholm: col 1/lines 15-65, col 18/line 12-22) (Figs. 1-2, (102,104)), col 4/lines 15-col 6/line 4, col 12/lines 29-43);

however neither Hogan nor Lindholm explicitly teach means for substituting the old downloadable unit for the new downloadable unit;

Nakagawa teaches a system/method related to software distribution/maintenance with which a software distributors can provide and update for a number of users software/services over a network, for systematically distributed/maintained, re-installing and upgrading via a network connecting many distributor and users of client/server software, wherein a client program automatically updates the software to the latest version according to the update instruction information when it is received (Nakagawa: col 1/line 13-col 5/line 10, abstract), disclosing means for retrieving the network device control software program binary file having an embedded old downloadable unit for performing an old service from a network device (Nakagawa: col 22/lines 35-62);

It would be obvious to one ordinary skilled in the art at the time the invention was made to to modify exist system with means for retrieving the network device control software program binary file having an embedded old downloadable unit for performing an old service from a network device, as taught by Nakagawa, motivation would be to further enhance existing means for adding, upgrading services to include a software distribution and maintenance means obtainable over a network for other various types of software such as product software, shareware, embedded software, freeware, scientific prototype software, intra-office software, etc, in an immediately operable form.

5. Claims **3, 16, 29 and 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hogan et. al (Hogan)** U.S. Patent No. **5,778,368** in view of **Lindholm** U.S. Patent No. **5,859,982** in further view of **Gish** U.S. Patent **5,768,510**.

Regarding claim 3, 16, 29, and 39, the combined teachings of Hogan and Lindholm as discussed above, however Hogan nor Lindholm explicitly teach wherein the step of obtaining a downloadable unit includes embedding ActiveX TM control and associated browser capabilities.

Gish teaches a system/method distributed computer system comprising client computer software, server computer and a network for connecting the client computer to the server computer which utilize an execution software code configured to couple the server computer and the client computer via the network, disclosing means for obtaining downloading units (applets) using ActiveX control technology for embedding software into downloadable units installing and configuring associated browser capabilities (Gish: col 15/line-col 16/line 8, col 16/lines 54-col 17/line 10);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify existing system with means for obtaining a downloadable unit includes embedding ActiveX TM control and associated browser capabilities, as taught by Gish, motivation extend functionalities existing in Java (applets) technology to similar functions provided by ActiveX technologies, to give developers/designers to manufacture dynamic content for the Internet and network devices that work on multiple platforms, and are being widely supported, these small, fast components that enable developers to embed parts of software supported by a variety of programming languages, where one of ordinary skill in the art readily recognizes that ActiveX could be substituted for JAVA without undue experimentation to practice the invention.

Response to Arguments

6. It is argued (A) prior art of record Hogan nor Lindholm does not teach claim limitation as recited; (i) "a downloadable units having a bundle of components to allow a remote client to manage an configure a network device without having the necessary software and downloadable units embedded in the software to allow a remote client to manage and configure a network device without the necessary supporting software"; (ii) compiling the software program into a binary file and embedding the downloadable unit into the binary file;

7. It is argued (B) that presented obviousness is invalid because of the scope and the content of the prior art, specifically, the Hogan and Lindholm are different, non-related patent and action does not further state why it is "apparent" to user the combination of prior art patents to obtain the claimed invention, nor does the combination result in the claimed invention and further there is not motivation to combine the prior art referenced.

8. It is argued that (C) the claimed invention itself is manufactured with the appropriate binary control software installed with the device-specific downloadable units embedded therein, wherein downloadable units include a bundle of components to provide greater functionality, utility and comprehensive support of the network device, these features are distinguishable from prior art's teachings, wherein invention teaches steps involved in compilation of the software and embedding of configuration files so that the network device can be manufactured with downloadable units pre-installed and available for download by a client, offering remote configuration and management capability from any node on the network.

9. In response to point (A); it is respectfully noted that claims limitation recites according to amendment C, filed 10/10/00; (i) "...obtaining a downloadable unit configured to communicate with the network device control software program for later transmission over a network to a remote client to enable the remote client to remotely configure the network device, Hogan teaches obtaining a downloadable unit (col 7/lines 28-34, a component may be a framework, a binary file or the real-time embedded software or a combination of these, said

components are bundled (packet/un-packeted) by an application, downloadable-executable units, col 7/lines 54-65), configured to communicate with the network device control software program for later transmission over a network to a remote client (embedded units for transmission to a client, col 9/line 14-36, units downloadable via a transfer protocol, col 8/lines 59-col 9/line 13, transmission over the network of bundled units, col 5/lines 3-7 remotely) to enable the remote client to remotely configure the network device (col 15/lines 37-col 16/line 67), (prior art means for remote software installation, e.g. software installation on a network device by a user at remote computer, col 3/lines 61-col 3/line 4, downloadable units user configurable, col 20/lines 21-52, downloadable units comprising configuration files associated with network devices, col 17/lines 14-25); therefore Hogan teaches a repository (downloadable) unit configured enable a remote client to remotely configure the network device;

10. In response to applicant's argument (B) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, motivation although not required, may be found in the applied reference, see Lindholm, col 2/lines 10-19. In response to applicant's argument that prior art of record, specifically, the Hogan and Lindholm patent are non-analogous (non-related) art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Hogan patent is related to means for manipulating embedded software, col 1/lines 6-11, the Lindholm patent is related to the execution of software transmitted over the network with the object to reduce memory space (col 1/lines 15-28), therefore both patents are related to the manipulation transmission/execution of software program, in this aspect said patents are found to be in the same field of endeavor.

11. In response to applicant's argument (C) that the references fail to show certain distinguishable features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a binary control software installed with the device-specific downloadable units embedded therein, wherein downloadable units include a bundle of components to provide greater functionality, utility and comprehensive support of the network device, wherein invention teaches steps involved in compilation of the software and embedding of configuration files so that the network device can be manufactured with downloadable units pre-installed and available for download by a client, offering remote configuration and management capability from any node on the network") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Regarding Information Disclosure Statement received 02/07/01, this statement comprising 1-3 pages, which was received indicating that items of information are listed on an attaches form PTO-1449, however no PTO-1449 was found attached or enclosed on file wrapper, it is suggested that is PTO-1449 includes only U.S. patents only the form or a copy would be necessary to submit in subsequent communication to the office for Examiner's consideration.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Prieto, B.** whose telephone number **is (703) 305-0750**. The Examiner can normally be reached on Monday-Friday from 6:30 to 4:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, **Mark H. Rinehart** can be reached on **(703) 305-4815**. The fax phone number for the organization where this application or proceeding is assigned is **(703) 308-6606**. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is **(703) 305-3800/4700.**

Any response to this final action should be mailed to:

Box AF
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or faxed to:
(703) 308-9051, (for formal communications; please mark "EXPEDITED PROCEDURE")

Or:
(703) 305-7201 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

B. Prieto
Patent Examiner
July 17, 2001

LE HIEN LUU
PRIMARY EXAMINER